

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027133**Date Inspected:** 02-Feb-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** L & M Industrial Fabricators**Location:** Tangent Oregon**CWI Name:** Tom Dreyer**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Head Chimney**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Art Peterson arrived at L & M Industrial Fabricators between the times noted above to randomly observe Quality Control (QC) personnel monitor the welding operations performed by L & M personnel on the fabrication of chimney parapet walls to the Tower Heads. The following observations for the extra work being performed to the following contract change order were:

CCO: 196 - Description: Construct parapet walls at the Tower Heads

**West Tower Chimney Parapet:**

This QA Inspector randomly observed L & M welder Otis Smith (Welder ID #19) performing the fit-up and tack weld operation per the Flux Cored Arc Welding (FCAW-G) gas shielding process in the (3F) vertical position connecting base plates- (A11a), (A12a), (A13a), and (A15a) to the Tower Head top plate of the West Tower Head Chimney.

This QA Inspector observed QC Inspector Tom Dreyer verify prior to the start of the tack-weld operation, that the minimum preheat temperature as per the approved WPS was established and afterwards; verified that the welding parameters (Amps and Volts) were in accordance with WPS-D1.5-FC-002-3F using Hobart Excel Arc E71T-1 (.052") diameter electrode.

**East Tower Chimney Parapet:**

This QA Inspector randomly observed L & M welder David Harrington (Welder ID #34) performing the fit-up and

# WELDING INSPECTION REPORT

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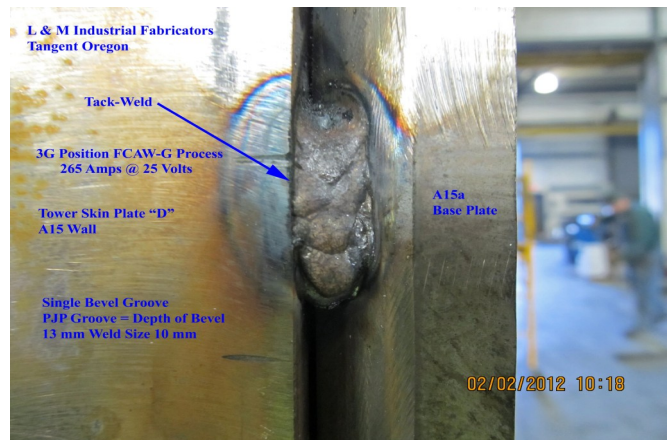
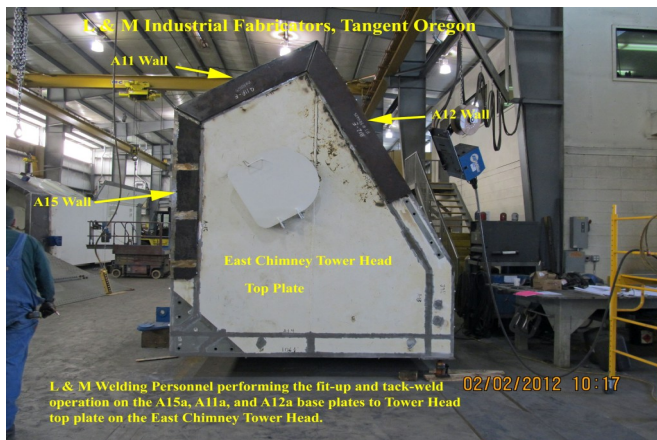
tack-weld operation per the Flux Cored Arc Welding (FCAW-G) gas shielding process in the (3F) vertical position connecting base plates- (A11a), (A12a), (A13a), and (A15a) to the Tower Head top plate of the East Tower Head Chimney.

This QA Inspector observed QC Inspector Tom Dreyer verify prior to the start of the tack-weld operation, that the minimum preheat temperature as per the approved WPS was established and afterwards; verified that the welding parameters (Amps and Volts) were in accordance with WPS-D1.5-FC-002-3F using Hobart Excel Arc E71T-1 (.052") diameter electrode.

## East Tower Chimney Parapet:

This QA Inspector randomly observed L & M welder David Harrington (Welder ID #34) performing the multi-pass fillet weld and partial-joint penetration (PJP) corner-joint weld operation per the Flux Cored Arc Welding (FCAW-G) gas shielding process in the (3F) and (3G) vertical positions connecting base plate- (A13a) to the Tower Head top plate of the East Tower Head Chimney.

This QA Inspector observed QC Inspector Tom Dreyer verify prior to the start of the fillet and PJP weld operation, that the minimum preheat temperature as per the approved WPS was established and afterwards; verified that the welding parameters (Amps, Volts and Travel Speed) were in accordance with WPS-D1.5-FC-002-3F and WPS D1.5-FC-TC-P4-GF-3G using Hobart Excel Arc E71T-1 (.052") diameter electrode.



## Summary of Conversations:

Only general conversations between QC and QA on this date.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy, 510-385-5910, who represents the Office of Structural Materials for your project.

**Inspected By:** Peterson, Art

Quality Assurance Inspector

**Reviewed By:** Levell, Bill

QA Reviewer